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Last logoff: 20aug03 15:53:01 Logon file405 21aug03 09:18:38 *** ANNOUNCEMENT ***

--File 654 - US published applications from March 15, 2001 to the present are now online. Please see HELP NEWS 654 for details.

-File 581 - The 2003 annual reload of Population Demographics is complete. Please see Help News581 for details.

--File 990 - NewsRoom now contains February 2003 to current records. File 992 - NewsRoom 2003 archive has been newly created and contains records from January 2003. The oldest months's records roll out of File 990 and into File 992 on the first weekend of each month. To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new OneSearch category.

--Connect Time joins DialUnits as pricing options on Dialog. See HELP CONNECT for information.

-SourceOne patents are now delivered to your email inbox as PDF replacing TIFF delivery. See HELP SOURCE1 for more information.

-Important news for public and academic libraries. See HELP LIBRARY for more information.

-Important Notice to Freelance Authors-See HELP FREELANCE for more information

NEW FILES RELEASED

***World News Connection (File 985)

***Dialog NewsRoom - 2003 Archive (File 992)

***TRADEMARKSCAN-Czech Republic (File 680)

***TRADEMARKSCAN-Hungary (File 681)

***TRADEMARKSCAN-Poland (File 682)

UPDATING RESUMED

RELOADED
***Population Demographics -(File 581)

(

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***CLAIMS Citation (Files 220-222)
REMOVED
  >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
  >>> of new databases, price changes, etc. <<<
* * * * See HELP NEWS 225 for information on new search prefixes
and display codes
SYSTEM:HOME
Cost is in DialUnits
Menu System II: D2 version 1.7.9 term=ASCII
            *** DIALOG HOMEBASE(SM) Main Menu ***
Information:
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3. Help in Choosing Databases for Your Topic
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   /H = Help
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Enter an option number to view information or to connect to an online
service. Enter a BEGIN command plus a file number to search a database
(e.g., B1 for ERIC).
? b 410
    21aug03 09:18:40 User268147 Session D136.1
      $0.00 0.171 DialUnits FileHomeBase
   $0.00 Estimated cost FileHomeBase
   $0.00 Estimated cost this search
   $0.00 Estimated total session cost 0.171 DialUnits
File 410:Chronolog(R) 1981-2003/Aug
    (c) 2003 The Dialog Corporation
   Set Items Description
? set hi %%%;set hi %%%
HILIGHT set on as "
HILIGHT set on as "
? b 34
    21aug03 09:18:45 User268147 Session D136.2
      $0.00 0.076 DialUnits File410
   $0.00 Estimated cost File410
  $0.01 TELNET
  $0.01 Estimated cost this search
  $0.01 Estimated total session cost 0.247 DialUnits
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File 34:SciSearch(R) Cited Ref Sci 1990-2003/Aug W3

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(c) 2003 Inst for Sci Info
   Set Items Description
? e cr=rowe peter
? s e39
   S3
        3 CR=ROWE PSN, 2000, V83, P192, ARCH DIS CHILD'
? s s1 or s2 or s3
       91 S1
       127 S2
       3 S3
   S4 201 S1 OR S2 OR S3
? s py<=2000
Processing
   S5 9366636 PY<=2000
? s s4 and s5
      201 S4
    9366636 S5
   S6 139 S4 AND S5
? s s6 and (july or august)
      139 S6
     31954 JULY
     27169 AUGUST
   S7 0 S6 AND (JULY OR AUGUST)
? s s6 and (jul or aug)
       139 S6
      114 JUL
      3723 AUG
       0 S6 AND (JUL OR AUG)
? s s6 and (mepe or rgd)
       139 S6
       26 MEPE
      3304 RGD
        1 S6 AND (MEPE OR RGD)
? type s9/full/all
9/9/1
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2003 Inst for Sci Info. All rts. reserv.
08828447 Genuine Article#: 334PU Number of References: 56
Title: MEPE, a new gene expressed in bone marrow and tumors causing
  osteomalacia
Author(s): Rowe PSN (REPRINT); deZoysa PA; Dong R; Wang HR; White KE;
  Econs MJ; Oudet CL
Corporate Source: ROYAL FREE & UNIV COLL MED SCH, DEPT BIOCHEM & MOL BIOL,
  CTR MOL OSTEO RENAL RES, ROWLAND HILL ST/LONDON NW3 2PF//ENGLAND/
  (REPRINT); ULP,INSERM, CNRS, INST GENET & BIOL MOL & CELLULARE/ILLKIRCH
  GRAFFENSTADEN//FRANCE/; INDIANA UNIV, SCH MED, DEPT
  MED/INDIANAPOLIS//IN/46202
Journal: GENOMICS, 2000, V67, N1 (JUL 1), P54-68
ISSN: 0888-7543 Publication date: 20000701
Publisher: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495
Language: English Document Type: ARTICLE
Geographic Location: ENGLAND; FRANCE; USA
Subfile: CC LIFE--Current Contents, Life Sciences
Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY; GENETICS &
  HEREDITY
Abstract: Oncogenic hypophosphatemic osteomalacia (OHO) is characterized by
  a renal phosphate leak, hypophosphatemia, low-serum calcitriol
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(1,25-vitamin-D3), and abnormalities in skeletal mineralization. Resection of OHO tumors results in remission of the symptoms, and there is evidence that a circulating phosphaturic factor plays a role in the bone disease. This paper describes the characterization and cloning of a gene that is a candidate for the tumor-secreted phosphaturic factor. This new gene has been named MEPE (matrix extracellular phosphoglycoprotein) and has major similarities to a group of bone-tooth mineral matrix phospho-glycoproteins (osteopontin (OPN; HGMW-approved symbol SPP1), dentin sialo phosphoprotein (DSPP), dentin matrix protein 1 (DMP1), bone sialoprotein II (IBSP), and bone morphogenetic proteins (BMP). AU the proteins including MEPE contain RGD sequence motifs that are proposed to be essential for integrin-receptor interactions. Of further interest is the finding that MEPE, OPN, DSPP, DMP1, IBSP, and BMP3 all map to a defined region in chromosome 4q. Refined mapping localizes MEPE to 4q21.1 between ESTs D482785 (WI-6336) and D4S2844 (WI-3770). MEPE is 525 residues in length with a short N-terminal signal peptide. High-level expression of MEPE mRNA occurred in all four OHO tumors screened. Three of 11 non-OHO tumors screened contained trace levels of MEPE expression (detected only after RT-PCR and Southern P-39 analysis). Normal tissue expression was found in bone marrow and brain with very-low-level expression found in lung, kidney, and human placenta. Evidence is also presented for the tumor secretion of clusterin (HGMW-approved symbol CLU) and its possible role as a cytotoxic factor in one of the OHO patients described. (C) 2000 Academic Press. ? s s6 and ("matrix extracellular") 139 S6 0 MATRIX EXTRACELLULAR 0 S6 AND ("MATRIX EXTRACELLULAR") ? s s6 and (phosphoglycoprotein or phospho-glycoprotein) 139 S6 89 PHOSPHOGLYCOPROTEIN 0 PHOSPHO-GLYCOPROTEIN S11 1 S6 AND (PHOSPHOGLYCOPROTEIN OR PHOSPHO-GLYCOPROTEIN) ? s s9 or s11 1 89 1 S11 S12 1 S9 OR S11 ? ds Items Description Set 91 CR='ROWE PS, 1990, THESIS U NOTTINGHAM' OR CR='ROWE PS, 19-91, CYTOGENET CELL GENET' OR CR='ROWE PS, 1996, V18, P159, BO-NE' OR E7 OR E8 OR E9 OR E10 OR E11 OR E12 OR E13 OR E14 OR E-15 OR E16 OR E17 OR E18 OR E19 OR E20 OR E21 S₂ 127 CR='ROWE PSN, 1994, V91, P291, HUM GENET' OR CR='ROWE PSN, 1994, V93, P291, HUM GENET' OR CR='ROWE PSN, 1994, V94, P457, HUM GENET' OR E25 OR E26 OR E27 OR E28 OR E29 OR E30 OR E31 OR E32 OR E33 OR E34 OR E35 OR E36 OR E37 OR E38 S3 3 CR=ROWE PSN, 2000, V83, P192, ARCH DIS CHILD' 201 SLOR S2 OR S3 **S4** S5 9366636 PY<=2000 **S6** 139 S4 AND S5 0 S6 AND (JULY OR AUGUST) **S7** S8 0 S6 AND (JUL OR AUG) S9 1 S6 AND (MEPE OR RGD) 0 S6 AND ("MATRIX EXTRACELLULAR") S10 1 S6 AND (PHOSPHOGLYCOPROTEIN OR PHOSPHO-GLYCOPROTEIN) S11 S12 1 S9 OR S11

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NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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=> s tdlqergdndispfsgdgqpfkd/sqep 2 TDLQERGDNDISPFSGDGQPFKD/SQEP 52754 SOL=23

2 TDLQERGDNDISPFSGDGQPFKD/SQEP L1 (TDLQERGDNDISPFSGDGQPFKD/SQEP AND SQL=23)

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=> s dfegsgytdlqergd/sqsp 23 DFEGSGYTDLQERGD/SQSP L3

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=> s ytdlqergdndispf/sqep 1 YTDLQERGDNDISPF/SQEP 101442 SQL=15

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=> s ergdndispfsgdgq/sqep

2 ERGDNDISPFSGDGQ/SQEP

101442 SQL=15

L7 2 ERGDNDISPFSGDGQ/SQEP

(ERGDNDISPFSGDGQ/SQEP AND SQL=15)

=> s ergdndispfsgdgq/sqsp

L8 17 ERGDNDISPFSGDGQ/SQSP

=> s 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18

L9 28 L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8

=> s 19 and bone

42012 BONE

L10 1 L9 AND BONE

=> s 19 and (phosphoglycoprotein or "phospho glycoprotein" or phosphatonin or osteopontin or sialo?)

4 PHOSPHOGLYCOPROTEIN

29614 "PHOSPHO"

26676 "GLYCOPROTEIN"

4 "PHOSPHO GLYCOPROTEIN"

("PHOSPHO"(W)"GLYCOPROTEIN")

9 PHOSPHATONIN

123 OSTEOPONTIN

1290 SIALO?

L11 5 L9 AND (PHOSPHOGLYCOPROTEIN OR "PHOSPHO GLYCOPROTEIN" OR PHOSPHA TONIN OR OSTEOPONTIN OR SIALO?)

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COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

164.34 164.55

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L12 13 L9

=> s 110

L13 3 L10

=> s 111

L14 6 L11

=> s 112 or 113 or 114

L15 13 L12 OR L13 OR L14

=> d 115 all 1-13
```

L15 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN AN 2003:571103 CAPLUS

TI Albumin fusion proteins for prolonged shelf-life of therapeutic proteins

IN Ballance, David James; Turner, Andrew John; Rosen, Craig A.; Haseltine, William A.

PA Human Genome Sciences, Inc., USA; Delta Biotechnology Limited; Principia Pharmaceutical Corporation

SO PCT Int. Appl., 598 pp. CODEN: PIXXD2

DT Patent

LA English

IC ICM C12N

CC 63-3 (Pharmaceuticals)
Section cross-reference(s): 3

FAN.CNT 2

PATENT NO.

KIND DATE

APPLICATION NO. DATE

PI WO 2003060071 A2 20030724 WO 2002-US40891 20021223
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-341811P P 20011221

US 2001-341811P P 2001122 US 2002-350358P P 20020124 US 2002-351360P P 20020128 US 2002-359370P P 20020226

AB The present invention encompasses albumin fusion proteins. Many therapeutic proteins in their native state or when recombinantly produced are typically labile mols. exhibiting short shelf-lives, particularly when formulated in aq. solns.; fusions of the therapeutic protein with human serum albumin have a longer serum half-life and/or stabilized activity in soln. (or in a pharmaceutical compn.) in vitro and/or in vivo than the corresponding unfused therapeutic mols. Thus, albumin fusion proteins are provided comprising granulocyte colony-stimulating factor, interleukin 2, parathormone, erythropoietin, interferon .beta., interferon .alpha.2, interferon A/D hybrid, a single-chain insulin analog, growth hormone, and (7-36)GLP-1. Nucleic acid mols. encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors contg. these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Addnl. the present invention encompasses pharmaceutical compns. comprising albumin fusion proteins and methods of treating or preventing diseases,

disorders or conditions related to diabetes mellitus using albumin fusion proteins of the invention.

ST albumin fusion therapeutic protein shelflife

IT Animal cell line of therapeutic proteins)

L15 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:978333 CAPLUS

DN 138:33382

TI Integrin binding motif containing peptides and methods of treating skeletal diseases

IN Kumagai, Yoshinari; Yoneda, Toshiyuki; Blacher, Russell Wayne

PA USA

SO U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Ser. No. 641,034. CODEN: USXXCO

DT Patent

LA English

IC ICM A61K039-00

ICS C07K014-435

NCL 424185100; 530324000; 530326000; 530327000

CC 1-12 (Pharmacology)

Section cross-reference(s): 62, 63

FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 2002197267 A1 20021226 US 2001-812485 20010319 WO 2002014360 A1 20020221 WO 2001-US25542 20010814

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001086491 A5 20020225 AU 2001-86491 20010814

EP 1309616 A1 20030514 EP 2001-965941 20010814

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2000-641034 A2 20000816

US 2001-812485 A 20010319

WO 2001-US25542 W 20010814

AB Peptide sequences comprising 10 to 50 amino acids are disclosed. The sequences are characterized by contg. at least one of an integrin-binding motif such as an RGD sequence, a glycosaminoglycan binding motif, and a calcium binding motif, and the remainder of amino acids contiguous with the RGD sequence in matrix extracellular phosphoglycoprotein. The sequences may be formulated for injection or dispersed in toothpaste or a mouthwash or gum patch and administered to enhance bone/tooth growth and/or reduce excessive urinary phosphate loss from the body.

ST integrin binding peptide bone growth urine phosphate loss

IT Integrins

RL: BSU (Biological study, unclassified); BIOL (Biological study) methods of treating skeletal diseases)

L15 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:216975 CAPLUS

DN 137:227273

TI Prediction of unidentified human genes on the basis of sequence similarity to novel cDNAs from cynomolgus monkey brain

AU Osada, Naoki; Hida, Munetomo; Kusuda, Jun; Tanuma, Reiko; Hirata, Makoto;

Hirai, Momoki; Terao, Keiji; Suzuki, Yutaka; Sugano, Sumio, Hashimoto, Katsuvuki

CS Div. Genetic Resources, National Inst. Infectious Diseases, Shinjuku-ku, 162-8640, Japan

SO GenomeBiology [online computer file] (2001), 3(1), No pp. given CODEN: GNBLFW; ISSN: 1465-6914

URL: http://genomebiology.com/2001/3/1/research/0006

PB BioMed Central Ltd.

DT Journal; (online computer file)

LA English

CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 6, 7, 13

AB The complete assignment of the protein-coding regions of the human genome is a major challenge for genome biol. today. We have already isolated many hitherto unknown full-length cDNAs as orthologs of unidentified human genes from cDNA libraries of the cynomolgus monkey (Macaca fascicularis) brain (parietal lobe and cerebellum). In this study, we used cDNA libraries of three other parts of the brain (frontal lobe, temporal lobe and medulla oblongata) to isolate novel full-length cDNAs. The entire sequences of novel cDNAs of the cynomolgus monkey were detd., and the orthologous human cDNA sequences were predicted from the human genome sequence. We predicted 29 novel human genes with putative coding regions sharing an open reading frame with the cynomolgus monkey, and we confirmed the expression of 21 pairs of genes by the reverse transcription-coupled polymerase chain reaction method. The hypothetical proteins were also functionally annotated by computer anal. In conclusion, the 29 new genes had not been discovered in recent explorations for novel genes in humans, and the ab initio method failed to predict all exons. Thus, monkey cDNA is a valuable resource for the prepn. of a complete human gene catalog, which will facilitate post-genomic studies.

ST sequence Macaca human cattle brain protein enzyme cDNA

IT Proteins

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL

(19) Wolfsberg, T; Nucleic Acids Res 1997, V28, P1626

L15 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:142748 CAPLUS

DN 136:205385

TI Integrin binding motif containing peptides and methods of treating skeletal diseases

IN Kumagai, Yoshinari; Blacher, Russell Wayne; Yoneda, Toshiyunki

PA Big Bear Bio Inc., USA

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07K014-00

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 62

FAN.CNT 2

PATENT NO. KIND DATE

APPLICATION NO. DATE

PI WO 2002014360 A1 20020221 WO 2001-US25542 20010814
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, AU 2001086491 A5 20020225 AU 2001-86491 20010814
EP 1309616 A1 20030514 EP 2001-965941 20010814
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2000-641034 A 20000816
US 2001-812485 A 20010319
WO 2001-US25542 W 20010814
OS MARPAT 136:205385

Same forvier pat,

AB Peptide sequences comprising 10 to 50 amino acids are disclosed. The sequences are characterized by contg. at least one of an integrin binding motif such as an RGD sequence, a glycosaminoglycan binding motif, and a calcium binding motif, and the remainder of amino acids contiguous with the RGD sequence in matrix extracellular phosphoglycoprotein. The sequences may be formulated for injection or dispersed in toothpaste or a mouthwash or gum patch and administered to enhance bone/tooth growth and/or reduce excessive urinary phosphate loss from the body.

ST integrin binding peptide dentifrice bone growth tooth phosphate loss

IT Glycosaminoglycans, biological studies

(3) University College London; WO 9960017 A2 1999 CAPLUS

L15 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:142473 CAPLUS

DN 136:189126

TI Dental products comprising a bone growth-enhancing peptide

IN Yoneda, Toshiyuki; Nomizu, Motoyoshi; Kumagai, Yoshinari

PA Big Bear Bio Inc., USA

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K007-16

ICS A61K007-22; A61K038-00; A61K038-16; C07K017-00

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002013775 A1 20020221 WO 2001-US25101 20010809 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2001083268 A5 20020225 AU 2001-83268 20010809 EP 1313440 A1 20030528 EP 2001-962055 20010809 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2000-225879P P 20000816

WO 2001-US25101 W 20010809

AB Dental products such as toothpastes, mouthwash and dental floss are disclosed which products are enhanced by having dissolved, dispersed or coated thereon a compd. which promotes bone growth. Preferred compds. are peptide sequences comprising 10 to 50 amino acids are disclosed. The sequences are characterized by contg. an integrin-binding motif such as RGD sequence and the remainder of amino acids contiguous with the RGD sequence in matrix extracellular phosphoglycoprotein. The sequences may be formulated for dispersal in toothpaste or a mouthwash and administered to enhance bone/tooth growth. When the dental products are used repeatedly over time they enhance good dental health.

ST dentifrice bone growth promoter RGD peptide sequence

(7) Tseng; US 6027592 A 2000

L15 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:935786 CAPLUS

DN 136:48810

TI Full-length cDNA clones for polypeptide hormone phosphatonin and its use in drug screening

IN Kurokawa, Tomofumi; Yamada, Takao; Morimoto, Shigeto

PA Takeda Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 130 pp. CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM C12N015-12

ICS C12P021-02; C07K014-47; C12N005-10; C07K016-18; A61K045-00; A61P003-12; G01N033-566; G01N033-50; G01N033-15

CC 2-2 (Mammalian Hormones)

Section cross-reference(s): 3

FAN.CNT 1

PATENT NO. KIND DATE

APPLICATION NO. DATE

PI WO 2001098495 A1 20011227 WO 2001-JP5263 20010620 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 2001-74566 20010620 AU 2001074566 A5 20020102 JP 2001-186905 20010620 JP 2002335973 A2 20021126 A1 20030319 EP 2001-941123 20010620 EP 1293568 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR PRAI JP 2000-191088 A 20000621 WO 2001-JP5263 W 20010620

AB The present invention relates to full-length cDNA clones for a previously isolated human protein phosphatonin, having phospho-diuretic, hypophosphatemia induction, sodium-dependent phosphate transport inhibition, and/or 25-hydroxyvitamin D3-1.alpha.-hydroxylase activity regulation effect, and use in drug screening. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to methods useful for diagnosis and therapy for disorders related to this novel human protein. Screening for receptor agonists or antagonists, and proteinase inhibitors, as drug candidates are claimed. Full-length cDNA clones contg. the sequence coding for a fragment previously reported (WO 9960017) were obtained from a human cDNA library derived from oncogenic hypophosphatemic osteomalacia (OHO). patient. The encoded protein has 525 amino acids, having extra 95 amino acids including the initial Met to the N-terminal of the fragment reported in WO 9960017. The rest of the sequence was identical except for a nucleotide at 293 position (C for G), causing an amino acid substitution (Leu for Val). Various motifs, such as glycosaminoglycan attachment sites, RGD sequence, myristoylation sites, phosphorylation sites for protein kinase C, casein kinase II, cAMP-dependent protein kinase, or tyrosine kinase, were identified by sequence anal. Phosphorylation by casein kinase II was demonstrated for the recombinant phosphatonin expressed in E. coli. Prodn. of antibodies and use in establishment of ELISA for phosphatonin detection is also described. Recombinant expression in CHO cells and demonstration of phosphate intake inhibition in proximal renal tubule epithelial cells, are also described.

ST human phosphatonin full length cDNA sequence drug screening (3) Rowe, P, Bone 1996, V18(2), P159 CAPLUS

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AN 2001:730817 CAPLUS
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DN 135:268198

TI Sequences of human oncogenic osteomalacia-related protein 1 (OOM-1) and therapeutic uses thereof

IN Schiavi, Susan, Madden, Stephen; Manavalan, Parthasarathy, Levine, M. D. Michael; Jan De Beur, Suzanne

PA Genzyme Corporation, USA; Johns Hopkins University

SO PCT Int. Appl., 65 pp. CODEN: PIXXD2

DT Patent

LA English

IC ICM C07K014-47

CC 3-2 (Biochemical Genetics)
Section cross-reference(s): 1, 14

FAN.CNT 1

PATENT NO. KIND DATE

APPLICATION NO. DATE

PI WO 2001072826 A2 20011004 WO 2001-US9289 20010322 WO 2001072826 A3 20020523

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 2002102641 A1 20020801 US 2001-814550 20010322

PRAI US 2000-191786P P 20000324 US 2000-241598P P 20001019

AB The invention provides sequences of protein and cDNA of human oncogenic osteomalacia-related protein (OOM-1). The invention also provides expression systems, including gene delivery vehicles such as liposomes and vectors, and host cells contg. the polynucleotides. The present invention further provides proteins encoded by the polynucleotides, antisense oligonucleotides, antibodies that specifically recognize and bind to these proteins, as well as hybridoma cell lines. In particular, the invention discloses that the proteins are involved in modulating bone mineralization and phosphate metab. The invention also provides methods of monitoring expression of the gene and detecting neoplastic cells assocd. with oncogenic osteomalacia. The invention discloses methods for modulating bone mineralization activity and phosphate metab. as well as methods for treating diseases related to abnormal bone mineralization and abnormal phosphate metab.

ST human oncogenic osteomalacia gene bone mineralization phosphate metab sequence

IT Databases

(DNA, contg. OOM-1 DNA sequence; sequences of oncogenic

L15 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:654733 CAPLUS

DN 135:206498

TI Sequences of Mammalian osteoregulins and therapeutic uses thereof

IN Brown, Thomas Aquinas; De Wet, Jeffrey Roux; Gowen, Lori Christine; Harnes, Lynn Marie

PA Pfizer Products Inc., USA

SO Eur. Pat. Appl., 90 pp. CODEN: EPXXDW

DT Patent

LA English

IC ICM C12N015-12

<u>(</u>)

ICS C07K014-47; A01K067-027; C12Q001-68; G01N033-68

CC 3-3 (Biochemical Genetics)

Section cross-reference(s): 1, 6, 13

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI EP 1130098 A2 20010905 EP 2001-301768 20010227

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2001321187 A2 20011120 JP 2001-55757 20010228 PRAI US 2000-185617P P 20000229

US 2000-234500P P 20000922

AB The invention provides a novel cDNA transcript expressed specifically in rat osteoblasts and osteocytes that encodes a 45 kDa polypeptide. The mouse and human forms of this novel protein are also identified. Characterization revealed the protein to be a secreted, RGD motif contg. protein with a limited homol. to dmpl, an extracellular matrix protein present in bone and teeth. Thus, this mammalian protein is designated as "osteoregulin.". Further studies of osteoregulin expression patterns and function have confirmed that osteoregulin plays an important role in controlling bone homeostasis, adipose regulation, and the calcification of atherosclerotic plaques. The invention features novel osteoregulin polypeptides, nucleic acid sequences which encode the polypeptides, vectors, antibodies, hosts which express heterologous osteoregulins, and animal cells and mammals with a targeted disruption of an osteoregulin gene. These osteoregulins play a role in regulating bone homeostasis, adiposity, and the calcification of atherosclerotic plaques. Accordingly, the invention also features screening assays to identify modulators of osteoregulin activity as well as methods of treating mammals for diseases or disorders assocd, with osteoregulin activity.

ST sequence osteoregulin mouse human rat

IT RNA splicing

(alternative, sequences of Mammalian osteoregulins and therapeutic uses therapeutic uses thereof)

L15 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:654731 CAPLUS

DN 135:206497

TI Primers for synthesizing full-length cDNA clones from human tissues

IN Ota, Toshio; Nishikawa, Tetsuo; Isogai, Takao; Hayashi, Koji; Ishii, Shizuko; Kawai, Yuri; Wakamatsu, Ai; Sugiyama, Tomoyasu; Nagai, Keiichi; Kojima, Shinichi; Otsuki, Tetsuji; Koga, Hisashi

PA Helix Research Institute, Japan

SO Eur. Pat. Appl., 1381 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C12N015-12

ICS C12N015-11; C12N015-10; C12N015-70; C12N015-85; C12N005-10; C12N001-21; C07K014-47; C07K016-18; C12Q001-68

CC 3-3 (Biochemical Genetics)

Section cross-reference(s): 6, 13

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI EP 1130094 A2 20010905 EP 2000-114089 20000707 EP 1130094 A3 20011121

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2002017375 A2 20020122 JP 2000-253172 20000707

PRAI JP 1999-194486 A 19990708

JP 2000-118774 A 20000111

JP 2000-183765 A 20000502

AB Primers for synthesizing full-length cDNAs and their use are provided. Eight hundred thirty cDNAs encoding human proteins were isolated and nucleotide sequences of 5'-, and 3'-ends of the cDNAs were detd. Furthermore, primers for synthesizing the full-length cDNA are provided to clarify the function of the protein encoded by the cDNA. The full-length cDNAs of the present invention contg. the translation start sites provide information useful for analyzing the functions of the proteins. Tissue expression profiles and homol. comparisons with sequences from public databases are provided for each of the 830 cDNA clones.

ST cDNA cloning PCR primer sequence human; protein cDNA sequence human

IT Proteins, specific or class

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP cDNA clones from human tissues)

L15 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:444217 CAPLUS

DN 136:162014

TI MEPE, the gene encoding a tumor-secreted protein in oncogenic hypophosphatemic osteomalacia, is expressed in bone

AU Argiro, L.; Desbarats, M.; Glorieux, F. H.; Ecarot, B.

CS Genetics Unit, Shriners Hospital, Montreal, QC, H3G 1A6, Can.

SO Genomics (2001), 74(3), 342-351 CODEN: GNMCEP; ISSN: 0888-7543

PB Academic Press

DT Journal

LA English

CC 3-3 (Biochemical Genetics) Section cross-reference(s): 6, 13

AB The MEPE (matrix extracellular phosphoglycoprotein) gene is a strong candidate for the tumor-derived phosphaturic factor in oncogenic hypophosphatemic osteomalacia (OHO). X-linked hypophosphatemia (XLH) is phenotypically similar to OHO and results from mutations in PHEX, a putative metallopeptidase believed to process a factor(s) regulating bone mineralization and renal phosphate reabsorption. Here we report the isolation of the murine homolog of MEPE, from a bone cDNA library, that encodes a protein of 433 amino acids, 92 amino acids shorter than human MEPE. Mepe, like Phex, is expressed by fully differentiated osteoblasts and down-regulated by 1,25-(OH)2D3. In contrast to Phex, Mepe expression is markedly increased during osteoblast-mediated matrix mineralization. Greater than normal Mepe mRNA levels were obsd. in bone and osteoblasts

with mineralization. (c) 2001 Academic Press.

ST human mouse matrix extracellular phosphoglycoprotein cDNA sequence; Mepe expression oncogenic hypophosphatemic osteomalacia mouse bone

derived from Hyp mice, the murine homolog of human XLH. Our data provide the first evidence that MEPE/Mepe is expressed by osteoblasts in assocn.

IT Gene, animal

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL

L15 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:338717 CAPLUS

DN 134:348627

TI Cloning of a novel polypeptide hormone phosphatonin and its use in treating disorders of phosphate metabolism, vitamin D metabolism, skeletal mineralization, and skeletal formation

IN Rowe, Peter

PA University College London, UK

SO PCT Int. Appl., 135 pp. CODEN: PIXXD2

DT Patent

LA English

IC ICM C12N015-16

ICS C07K014-575; C07K016-26; C12Q001-68; A61K038-22; A61P019-08 CC 2-2 (Mammalian Hormones)
Section cross-reference(s): 3

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2001032878 A2 20010510 WO 2000-EP10747 20001031 WO 2001032878 A3 20011115

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1230369 A2 20020814 EP 2000-971403 20001031

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003513631 T2 20030415 JP 2001-535560 20001031 US 2003064498 A1 20030403 US 2002-132920 20020425

PRAI US 1999-434185 A 19991104 GB 1999-26424 A 19991108

WO 2000-EP10747 W 20001031

- AB The present invention relates to a novel human protein called phosphatonin, and isolated polynucleotides encoding this protein. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to this novel human protein. The specific conditions that can be treated include disorders of phosphate metab., vitamin D metab., skeletal mineralization, and skeletal formation.
- ST cDNA sequence human phosphatonin; metabolic disorder skeletal disorder treatment phosphatonin

(use of phosphatonin in combination with zinc metalloendopeptidase for treatment of a disorder of phosphate metab. or bone mineral loss)

- L15 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2000:578625 CAPLUS

DN 134:1213

- TI MEPE, a new gene expressed in bone marrow and tumors causing osteomalacia
- AU Rowe, Peter S. N.; De Zoysa, Priyal A.; Dong, Rong; Wang, Huei Rong; White, Kenneth E.; Econs, Michael J.; Oudet, Claudine L.
- CS Centre for Molecular Osteo-Renal Research, Department of Biochemistry and Molecular Biology, Royal Free and University College Medical School, London, NW3 2PF, UK
- SO Genomics (2000), 67(1), 54-68 CODEN: GNMCEP; ISSN: 0888-7543
- PB Academic Press
- DT Journal
- LA English
- CC 3-3 (Biochemical Genetics)
 - Section cross-reference(s): 6, 13, 14

AB Oncogenic hypophosphatemic osteomalacia (OHO) is characterized by a renal phosphate leak, hypophosphatemia, low-serum calcitriol (1,25-vitamin-D3), and abnormalities in skeletal mineralization. Resection of OHO tumors results in remission of the symptoms, and there is evidence that a circulating phosphaturic factor plays a role in the bone disease. This paper describes the characterization and cloning of a gene that is a candidate for the tumor-secreted phosphaturic factor. This new gene has been named MEPE (matrix extracellular phosphoglycoprotein) and has major

unit for artive 8/11

similarities to a group of bone-tooth mineral matrix phosphoglycoproteins (osteopontin (OPN; HGMW-approved symbol SPP1), dentin sialo phosphoprotein (DSPP), dentin matrix protein 1 (DMP1), bone sialoprotein II (IBSP), and bone morphogenetic proteins (BMP)). All the proteins including MEPE contain RGD sequence motifs that are proposed to be essential for integrin-receptor interactions. Of further interest is the finding that MEPE, OPN, DSPP, DMP1, IBSP, and BMP3 all map to a defined region in chromosome 4q. Refined mapping localizes MEPE to 4q21.1 between ESTs D4S2785 (WI-6336) and D4S2844 (WI-3770). MEPE is 525 residues in length with a short N-terminal signal peptide. High-level expression of MEPE mRNA occurred in all four OHO tumors screened. Three of 11 non-OHO tumors screened contained trace levels of MEPE expression (detected only after RT-PCR and Southern 32P anal.). Normal tissue expression was found in bone marrow and brain with very-low-level expression found in lung, kidney, and human placenta. Evidence is also presented for the tumor secretion of clusterin (HGMW-approved symbol CLU) and its possible role as a cytotoxic factor in one of the OHO patients described. (c) 2000 Academic Press.

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10-50 aa long??
RoD Perhode too long
L15 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:753255 CAPLUS
DN 132:722
TI Cloning of human polypeptide hormone phosphatonin involved in phosphate
  metabolism
IN Rowe, Peter
PA University College London, Uk
SO PCT Int. Appl., 136 pp.
  CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K014-09
CC 2-10 (Mammalan Hormones)
  Section cross-reference(s): 1
FAN.CNT 1
  PATENT NO.
                  KIND DATE
                                    APPLICATION NO. DATE
PI WO 9860017
                                   WO 1999-EP3403 19990518
                   A2 19991125
   WO 9960017
                  A3 20000309
     W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
       DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
       JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
       MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
       TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
       MD, RU, TJ, TM
     RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
       ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
       CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                  CA 1999-2329054 19990518
                  AA 19991125
   CA 2329054
                                  AU 1999-43624 19990518
   AU 9943624
                  A1 19991206
                                  GB 1999-11577
                                                 19990518
   GB 2339572
                  A1 20000202
                                 EP 1999-926320 19990518
  EP 1086225
                 A2 20010328
     R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE, FI
                  T2 20020528
   JP 2002515232
                                  JP 2000-549635 19990518
PRAI GB 1998-10681 A 19980518
   GB 1998-19387 A 19980904
   WO 1999-EP3403 W 19990518
AB The present invention relates to a novel human protein called phosphatonin
   (also known as Metastatic-tumor Excreted Phosphaturic-Element or MEPE),
   and isolated polynucleotides encoding this protein. Phosphatonin
   modulates Na+-dependent phosphate co-transport, vitamin D metab. via renal
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25-hydroxyvitamin D3 24-hydroxylase or 25-hydroxyvitamin D3

1.alpha.-hydroxylase, and/or bone mineralization. Phosphatonin was isolated from a cDNA library constructed form mRNA extd. from a meningeal phosphaturic-mesenchymal-tumor resected from a patient suffering from oncogenic hypophosphatemic osteomalacia. The cDNA codes for a protein 430 amino acids in length. Phosphatonin may be cleaved proteolytically in vivo, for example by the PHEX metalloendopeptidase. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to this novel human protein.

ST phosphatonin phosphate metab hormone cDNA sequence human IT Kidney, disea